



724 Oak Street, Hood River, Oregon 97031  
Phone: 541.387.3030 Fax: 541.387.3029  
721 NW 9<sup>th</sup> Suite# 300 Portland, OR 97209  
PO Box 912 Bingen, Washington 98605  
[www.columbiariverkeeper.org](http://www.columbiariverkeeper.org)

---

October 12, 2006

Jim La Spina  
Permit Writer  
Water Quality Program  
Dept. of Ecology

RE: Columbia Riverkeeper comments on pre-draft industrial stormwater permit

Dear Jim:

Thank you for the opportunity to review the pre-draft general industrial stormwater permit. I am submitting comments on behalf of Columbia Riverkeeper and the Northwest Environmental Defense Center. I appreciate the significant amount of work and energy you have clearly put into the proposed permit and the process behind it.

Our chief concern with the permit is that it does not ensure compliance with applicable state water quality standards. 33 USC § 402(p)(3)(A) is very clear that such compliance is necessary stating, "Permits for discharges associated with industrial activity shall meet all applicable provisions of this section and section 301." The requirement to meet Section 301's mandated water quality standards is a clear departure from the treatment of municipal stormwater discharges in section 402 of the CWA and one that was obviously intended by the congressional drafters of the CWA.

While we appreciate that the permit appears to recognize the need to comply with water quality standards that is not sufficient to meet Ecology's responsibilities under federal law. Ecology in fact needs to ensure that the permit terms, conditions and effluent limits that will ensure that water quality standards are actually met. As currently drafted even meeting the benchmarks and action levels would not necessarily ensure that water quality standards are met. Equally important, is the fact that the permit plainly allows for benchmarks and action levels to be significantly exceeded so long as some indefinite corrective actions are being taken. As a result, the permit would allow discharges that significantly exceed water quality standards to continue for multiple years while BMPs are being planned and tried. In fact, there does not appear to be any final date in the permit where a discharger will actually have to meet water quality standards or face a violation for doing so.

CRK's specific comments on the draft permit are provided below:

**Page 6**

The draft permit lists a number of facilities that are not required to obtain permit coverage but which "may" obtain such coverage Section AS(1)(C). Those not covered by the permit but which "may" apply for permit coverage include "Any part of a facility with a

discharge that is in compliance with the instructions of an On-Scene-Coordinator pursuant to 40 CFR part 300;" discharges from inactive coal mines, gas stations and other oil storage facilities.

**Question 1:** Why is it that the oil related facilities described in subsection 11 (at page 7) would not be required to obtain stormwater permits despite clearly being industrial in nature? Similarly, how would exempting inactive coal mines and other similar sites that were discharging polluted stormwater meet the requirements in 33 USC § 401(p)(3)(A) to ensure protection of water quality standards?

**Question 2:** We similarly do not understand why there is a proposed exempt for federally owned or operated facilities? Nothing in the CWA supports such an exemption.

## **Page 9**

### **No exposure certificate**

The proposed standards for obtaining a no exposure certificate do not require the collection or submission of any actual water quality data. This is a problem since absent such data there is not a reasonable evidentiary basis for concluding that the facility does generate stormwater pollution. Even if the owner/operators of a given facility honestly believes they meet the qualifications required to receive a no exposure certificate the proposed permit does not require any person with technical training or qualifications in stormwater to make the no exposure determination for the applicant. Given Ecology's limited resources it is unrealistic to think that Ecology staff have the time to meaningfully review each no exposure application.

Facilities could believe they meet the proposed permit conditions for a no exposure certificate, while not recognizing, for example, that the trucks which travel in and out of their covered facility each day are tracking heavy metals or other pollutants out into an area of the facility exposed to rainfall.

**Recommendation 3:** Require any party applying for a No Exposure Certificate to submit at least 1 grab sample from a first flush rainfall event to demonstrate that they do not have stormwater contaminants in their stormwater.

## **Page 12**

### **Permit process**

The proposed permit would require new dischargers to apply for "coverage at least 60 days before the commencement of stormwater discharge from the facility." Permit at 12. This is inadequate time for Ecology and the public to review the proposed discharge and meaningfully evaluate the impact of its discharges and should be lengthened for new dischargers to at least 120 days.

## **Page 13**

### **Permit coverage commencement**

The proposed permit does not appear to require any affirmative decision on Ecology's part to approve coverage for a given discharger who seeks coverage under the general permit. We believe this is a real problem because even if Ecology failed to even review a proposed permit application (due to lack of resources etc.) an application would be technically approved under the proposed permit. Ecology, however, has an affirmative duty under both state and federal law to ensure that a proposed permit will not cause a violation of applicable standards and needs to make an actual affirmative decision to approve or deny any given application for

permit coverage. This is not met with the default assumption that a permit is approved 60 days after submittal regardless of any affirmative action by Ecology.

**Recommendation:** Revised the proposed permit language to state that Ecology will provide written notice of its approval or denial of any application for permit coverage to both the applicant and any party that commented on the application or otherwise requested to be notified of actions on a given permit. Permit coverage will not commence until notice of approval is received by the applicant.

#### **Page 14**

##### **Section E(2) –**

**Recommendation:** It would make sense to clarify that a permit application needs to be sent to a municipal entity receiving stormwater discharges at the same time the application is sent to Ecology to ensure municipal entities have ample commenting and review opportunities.

##### **Section G(1)(b) –**

The current allowance for the transfer of permit requires that “The type of industrial activities and practices remain substantially unchanged.” Because the term “substantially unchanged” is ambiguous this requirement should be modified to read ““The type of industrial activities and practices remain substantially unchanged with no changes that could have the potential to increase or alter stormwater characteristics.”

#### **SWPPP**

**Section S3 (A)(4) –** The proposed permit would not require the applicant to submit a proposed SWPPP to Ecology. If Ecology is relying on the SWPPP as the main document to ensure compliance of stormwater discharges to state and federal requirements than Ecology has a responsibility to review a given SWPPP to ensure it meets the requirements of the permit and applicable laws. Additionally, Ecology should retain a copy of the SWPPP to allow for public access to these permit documents. It is unreasonable to require members of the public to deal directly with discharges given the real practical challenges this would pose to the public’s ability to have access to SWPPPs.

Additionally, the permit should require SWPPPs to be submitted in PDF readable electronic format to Ecology so that they could be made easily available to the public and could be incorporated into Ecology’s current on-line permit database. Given the widespread availability of free PDF creation programs on line there would be virtually no cost to dischargers to provide SWPPPs in this format and the benefits to both public and agency access to these documents would be significant.

#### **P 16**

##### **Requirements for SWPPP**

The current permit states that the SWPPP should “b. specify the *BMPs* necessary to comply with state *water quality standards*.” This fails to address, however, the situation where BMPs alone are inadequate to ensure compliance with water quality standards.

## **Page 20 SWPPP Requirements**

The proposed permit states that the SWPPP should identify measures to address peak flow “if necessary.” This should be changed to remove the term “if necessary” since every industrial facility should identify techniques to decrease peak flows and the “if necessary” term essentially puts the discharger in the position of determining if peak flow reduction measures are necessary without any clear standards or guidelines to ensure against wholesale dismissal of the peak flow impacts caused by stormwater discharges.

## **Page 24**

### **Sampling plans**

The proposed permit fails to describe what standards would guide “alternative” monitoring plans that could be approved by Ecology.

The permit fails to require sampling during first flush rainfall conditions which represent the worst case discharge scenario that Ecology is required to plan for. Requiring that at least one of the four samples be taken during the first significant rainfall event that occurs during the fall season is critical in characterizing the nature and effect of a given dischargers stormwater.

**Recommendation 4:** Include a requirement to sample during first flush type events.

The proposed sampling timing also would technically allow for all 4 sampling events to be condensed into the May/June period. This would not provide representative sampling.

**Recommendation 5:** As a result the permit should be changed to require that included in the four sampling events there is at least a fall, winter and spring sampling.

It is also unclear whether Ecology believes that only 4 sampling events will provide representational data regarding the applicant’s discharges. For any discharger that is considered to be a “significant contributor” the proposed permit should require at least monthly stormwater monitoring.

## **Page 26**

### **C. Exceptions to Sampling Requirements**

We object to any waiver of sampling at “inactive or un-staffed sites.” Regardless of whether a site is staff or un-staffed if it produces stormwater contamination then monitoring must be required to ensure permit and state and federal standards compliance.

**Question 6:** What is the legal and biological justification for a monitoring waiver for an inactive or un-staffed site? Is there anything in federal or state law which supports such a waiver?

CRK strongly opposes any waiver for monitoring based on failure to detect a given pollutant. Requiring regular and continued monitoring provides a real deterrent for process changes or a relaxing of source controls that could result in the presence of pollutants at a given site. Given that numerous chemical compounds used at regulated industrial sites are continually changing a site that did not show the presence of a given pollutant in several given years could easily start discharging that pollutant in later years even through a seemingly minor change in operations or materials.

Absent regular monitoring, Ecology would lack a reasonable basis to determine whether or not a given discharger was meeting water quality requirements of state and federal law.

**Extreme hardship exemption-** The draft permit states that Ecology can allow an extreme hardship exemption to the permit's monitoring requirements if Ecology "determine[s] that stormwater from the site will pose no significant environmental risk." The permit does not contain a definition of "significant environmental risk" and not provide any other clear standards for determining what would constitute an "extreme hardship." It is not clear from the permit that this would ensure protection of water quality standards industrial discharges must meet under the CWA. 33 USC § 401(p)(3)(A). Nothing under state or federal law allows a waiver of the minimal permit monitoring requirements required under this permit.

**Recommendation 7 :** Remove the extreme hardship monitoring exemption.

**Benchmarks** –As stated the draft permit's failure to require compliance with water quality standards violates the central requirement for industrial stormwater discharges in the CWA. 33 USC § 401(p)(3)(A). Providing benchmarks which do not at the time of permit issuance require compliance with water quality standards does not meet the requirements of the CWA nor does it ensure protection of beneficial uses.

The draft permit states "Benchmark values are not water quality standards and are not permit limits. They are indicator values." The permit further explains that "Values at or below benchmark are considered unlikely to cause a water quality violation." Since the benchmarks included in the permit are above levels well above those known to cause adverse impacts to beneficial uses it is unclear what supports the assertion that discharges at or below benchmark levels will protect water quality standards.

The fact that the "benchmark" must be doubled before the effluent concentration reaches an "action level" further undermines the notion that the permit somehow protects beneficial uses and the water quality standards meant to protect them.

The impacts of the proposed turbidity benchmarks, for example, show that at either 25 or 50 NTU stormwater discharges would be significantly outside the range of turbidity values that are consistent with the protection of beneficial uses.

Several recent documents surrounding an effort by Oregon DEQ to change its turbidity standard strongly support the impacts that 25 to 50 NTU water has on clear water dependent fish like salmon and steelhead. We have attached a copy of DEQ's Technical Basis for Revising the Turbidity Criteria (October, 2006) which includes the following findings:

"Taxonomic richness was also decreased at higher turbidity levels with approximately half of the species eliminated at around 25 NTUs, and approximately 25% gone at a turbidity level of 3 NTUs (EL50 = 25 NTUs; EL25 = 3 NTUs). (emphasis added, p . 26)

"A 5 NTU increase in turbidity reduced the productive euphotic volume of naturally clear lakes by as much as 80%, and chlorophyll-a concentration decreased significantly in glacially turbid lakes with decreased euphotic volume." At p. 23, 24

“preliminary evaluation by DEQ comparing turbidity levels to biotic indices in small Oregon streams indicates that ‘poor’ conditions for invertebrates occurred at turbidity levels of approximately 10 NTUs and greater (Doug Drake’s (DEQ) personal communication). “Poor” denotes biologically impaired conditions and was established as the 25th percentile of the distribution of indices data from reference sites. (emphasis added at p. 25.)

Additionally, a July 2006 scientific review of DEQ’s proposed turbidity standard by Oregon’s Independent Multidisciplinary Science Team (IMST) also highlights the impact of turbidity levels as low as 10 and 15 NTU, which can adversely affect salmon and trout feeding patterns and growth rates. (Also attached)

These documents and the scientific papers they rely on support that not only would the proposed bench marks and action not ensure protection of Washington’s turbidity standards but they would also put beneficial uses at risk.

We are similarly concerned that the benchmarks for lead, copper and zinc do not adequately protect water quality standards.

**Question 8:** What evidence is there that these levels will protect beneficial uses and ensure compliance with water quality standards? How do the action and benchmark levels compare to water quality standards?

The proposed exemption for monitoring lead absent an exceedance of the copper or zinc benchmark would not ensure protection of either water quality standards or beneficial uses from lead. Lead is a high impact bio-accumulative neurological toxic that has no safe level of human ingestion. The latest toxicological studies show that even small increases in childhood blood lead levels below levels previously assumed to be safe correlate to decreased IQ. As such, keeping lead out of the food chain and Washington’s waters should be a high priority. For many facilities covered under the proposed permit lead may be a pollutant of concern even where zinc and copper are not. Ecology has an independent duty to protect the public and Washington’s waters from lead.

CRK is also concerned that the proposed permit does not require any monitoring or action requirements for a range of other heavy metals or toxics that are present in stormwater.

**Question 9:** What other pollutants does Ecology know to be present in stormwater? Do these pollutants have a reasonable potential to exceed water quality standards? If so, then why are no permit or monitoring limits proposed?

**Monitoring and benchmark requirements for specific industries** – The proposed benchmarks and monitoring requirements for specific industries failure to ensure against pollutants known to be associated with these industries. For example, the benchmarks for Primary Metals, Metals Mining, Automobile Salvage, Scrap Recycling, Metals Fabricating only requires monitoring for lead. Stormwater discharge from salvage and scrap recycling yards, however, are well known to contain a broad variety of heavy metals and organic pollutants ranging from PCBs to arsenic.

**Recommendation 10:** The proposed list of industry specific pollutant parameters needs to be significantly expanded to include pollutants that Ecology has ample evidence are problems at industry-specific facilities.

### **Air transportation exemption for sampling**

The draft permit would unexplainably exempt airports from monitoring stormwater and proposed benchmarks for deicing related pollutants if the airports used less than 100,000 gallons of deicing or 100 tons of urea. This would exempt even some large airports in the state from any monitoring or controls on pollution related to deicing which can be significant. There is no legal basis for this exemption under state or federal law.

While we are unfamiliar with the exact quantities of deicing chemicals used at Washington airports, the Portland airport (PDX), for example, in some years uses only 20,000 gallons of deicing chemicals and would be essentially exempt from any meaningful controls under the proposed permit. Because of the serious impacts of de-icing chemicals on dissolved oxygen levels, however, the Port of Portland has spent over \$30 million in stormwater control measures over the last five years.

**Question 11:** What is the legal or biological basis for the proposed exemption for de-icing chemicals?

**Recommendation:** The proposed exemption for airports should be removed since it is flatly illegal and would undermine compliance with water quality standards.

**Recommendation:** Additionally, the permit should require monitoring for flame retardant chemicals which are present in de-icing chemicals and have been found to be increasing in Washington rivers like the Columbia as well as in women's breast milk.

The draft permit also fails to require any monitoring for toxics known to be present in airport stormwater. The extensive use of ground applied de-icing chemicals such as sodium formate and potassium acetate should be evaluated as a part of the proposed permit and specific limits should be set to ensure that stormwater discharges comply with Washington's health based water quality and aquatic toxicity standards.

**Question 12:** What are the specific chemical compounds that are discharged as a result of de-icing operations? De-icing chemicals such as propylene glycol contain other chemical compounds, such as flame retardants, that must be considered prior to setting adequate limits for airport related stormwater.

## **P 30**

### **Limits for non-hazardous waste landfills**

CRK supports the fact that the proposed permit includes specific effluent limits for non-hazardous waste landfills.

**Question 13:** Are the proposed maximum daily limits below state water quality standards for the receiving waters and if not how would the proposed limits ensure protection of water quality standards?

P 31

### **Conditionally approved non-stormwater discharges**

Since the proposed permit is a stormwater permit it is not appropriate or legal to attempt to provide permit coverage for non-stormwater discharges. The proposed permit is broadly worded to provide permit coverage to all “firefighting activities.” This is flatly inconsistent with the CWA since aerial fighting discharges into streams or other waterbodies should be evaluated and permitted under a distinct individual permit given the potentially significant impacts of such discharges on water bodies and the plain requirements of the CWA.

Irrigation drainage and the other non-stormwater discharges are similarly not appropriate to cover under this permit for the simple fact that they are not stormwater and should not be treated as such. Where this permit to require compliance with water quality then the practical effect of including non-stormwater discharges could be minimal, but since the permit attempts to require a lower standard the difference is significant.

**Question 14:** What legal basis is there to include non-stormwater discharges in a stormwater permit that applies state stormwater discharge standards?

P 33

### **Discharges into 303d-listed waters**

CRK supports the fact that the permit proposes to require compliance with discharges into water quality limited streams, but is concerned that the permit does not actually ensure compliance with standards.

S6 (c)(1)(A)- The permit says that discharges must “Sample its stormwater discharges to 303(d)-listed waters for the parameters specified on the permit cover letter, except for dissolved oxygen.”

**Question 15-** What parameters will be specific on the permit cover letter? How will this be determined?

P 34

The permit states that “The Permittee is not required to sample for specific parameters that are listed because of sediment, tissue, bioassay, and habitat.”

**Question 16 –** This would appear to exempt a discharger from monitoring for toxics that are related to a fish tissue caused standards exceedance. Is this accurate? What is the goal and justification for this exemption?

P 35

### **Table 6**



CRK is concerned that the proposed benchmarks and action levels will not ensure compliance with either water quality standards or the protection of beneficial uses. First, the list of Table 6 parameters omits pollutants like arsenic which the Columbia River and other waterbodies are water quality limited for.

**Question 17:** How would the proposed Table 6 values ensure protection with water quality standards?

The draft permit would exempt discharges from monitoring for temperature and there is no justification for such an exemption given the impacts that stormwater discharges can have seasonally on receiving water temperature.

#### **P 36**

The draft permit would not require compliance with TMDL limits when TMDLs are approved, but only after an administrative order is issued. Is this typical for how other NPDES discharges are treated or do the TMDL limits automatically become effective per the adoption of the TMDL? CRK believes that TMDL limits should become automatically applicable to dischargers and that stormwater permits should be modified accordingly at the time TMDLs are approved. We are unclear from a procedural standpoint whether or not this typically happens as a function of the TMDL approval. The draft permit, however, should make clear that permits will be revised to incorporate adopted TMDL levels if that is the expectation.

**Question 18:** Please clarify Ecology's intent on how and whether it will incorporate TMDL limits into applicable stormwater permits.

G.4- The draft permit states, "Where a *TMDL* for a parameter present in the Permittee's discharge has established a general wasteload allocation for industrial *stormwater* discharges, but has not identified specific requirements, Ecology will assume the Permittee's compliance with Conditions S3 (*SWPPPs*) and S4 (Sampling) complies with the approved *TMDL*."

There is a not a connection, however, between meeting even a general wasteload allocation in a TMDL and meeting Condition S3 SWPPP requirement. Since complying with S3 does not ensure compliance with a wasteload allocation or water quality standard it is not reasonable for Ecology to assume as much.

**Recommendation:** Ecology should not approve general wasteload allocations as a part of the TMDL process, but if it does it must as a part of the permitting process make the specific determinations about how the general wasteload will be met. Simply falling back on the SWPPPs will not ensure a general wasteload allocation would be met.

#### **P 38**

##### **S8 Corrective Actions**

The draft permits corrective actions section does not ensure protection of water quality standards at the time of permit issuance or even during the term of the permit. The proposed corrective actions instead would allow a long time period during which a facilities discharges could violate water quality standards and pose a direct and serious threat to the public health and aquatic species. Instead of requiring compliance with water quality standards the corrective actions propose steps that a discharger who is violating such standards should take and this does not meet the plain requirements of 33 USC 402(p)(3)(A) which requires industrial discharges to meet water quality standards required under section 301 of the Act.

## **P 43**

### **Reporting**

The permit should be revised to require monitoring and reporting in all four quarters of the year. Stormwater discharges that do occur during the generally dry season should be monitored and reported especially since discharges after a significant dry spell can have the highest concentrations of pollutants. If no stormwater discharge occurs during the dry season then no monitoring would be required and that could be noted in the DMR.

Because the permit as written applies to non-stormwater discharges the need to apply monitoring requirements to such discharges even during the dry season also supports removing the general dry season exemption for monitoring and reporting.

**Recommendation:** The permit should require that all DMRs be submitted in PDF readable electronic format for easy inclusion into Ecology's database.

## **P 45**

### **E(1)- Non-compliance notification –**

The draft language only requires notification if a permit condition is violated that “could result in the discharge of pollutants in a significant amount.” This leaves it in the hands of a discharger to determine whether a given permit violation or pollutant exceedance constitutes a “significant amount.” Is exceeding the lead action level by 20% a significant amount? Many dischargers do not necessarily have the experience or skills to determine whether an exceedance of a permit term is significant and the term is ambiguous in its meaning. Ecology should have the information needed to determine on its own whether a given exceedance is significant. To add clarity to the permit immediate notification should be required for any discharge that exceeds the benchmark or action level.

## **P 46**

### **Compliance with standards**

While CRK supports the requirement that discharges not cause or contribute to water quality standards violations, simply restating this requirement without providing the conditions that are necessary to meet the standards does not satisfy Ecology's duties under federal or state law to meet water quality standards.

By relying on the proposed benchmarks and action levels Ecology has no basis for assuming that compliance with the proposed permit will ensure compliance with water quality standards.

**Question 19:** How can Ecology reconcile the permit requirement that discharges not cause or contribute to water quality standards exceedance with the fact that a discharger could be fully complying with the proposed permit while grossly exceeding water quality standards?

**Question 20:** Is it true that a facility discharging into a 303(d) limited stream for arsenic could be significantly exceeding the action level for arsenic and still in compliance with this permit so long as they are taking the steps corrective steps required in the permit?

## **P 49**

**General permit modification** - The conditions under which the permit could be modified should be amended to include the adoption of a TMDL.

P 52

**Upset-** It should be clarified that rainfall events, even large storm events, do not constitute grounds for an upset defense. There is no provision in the federal CWA that allows for discharges that exceed water quality standards in the event of an upset and such a condition should be removed from the proposed permit.

## **Conclusion**

Thank you for considering these comments, we appreciate all the work you have put into this process and look forward to seeing a revised draft.

Sincerely,

Brent Foster  
Executive Director